

Input to be used in the Strategic Evolution of ESE Data Systems (SEEDS) Public Workshop being held February 5-7, 2002.

The questions are being answered from the perspective of the management of the Long Term Archive at the USGS Earth Resources Observation System (EROS) Data Center (EDC).

Because each archive manager faces unique challenges directly attributable to overall organizational mission, the answers provided are more broadly applicable.

1. **What are the critical issues related to the interfaces between data providers, active archives and LTA? Is there any merit in looking for or requiring common content standards, data formats and protocols/procedures in these interfaces or is it ok if each data product is treated on a case-by-case basis?**

Ideally, we should always be looking for ways to standardize content, data formats, and protocol/procedures. In the real world, one faced with shrinking budgets and escalating demands, we would be better served if we can find models or templates that minimize the need to reinvent processes. More effort should go into a better upfront understanding of how the data is to be used, its anticipated “lifespan”, and the likelihood of continued funding.

The better we understand the above, the better decisions we make regarding active and long term archiving solutions.

2. **What are the major cost drivers in the migration of data products from SIPS to active archive to LTA? How might costs be contained or minimized?**

The last sentence above reflects drivers and mitigation. Especially for LTA, consideration needs to be given to media and the hardware required to maintain the media. For example, magnetic media may only have a 10 – 12 year shelf life. Careful planning is required to ensure the media will always be accessible.

3. **How do you see levels of service for active archive products changing for LTA? Are service levels a cost driver for active and LTA?**

Depending on the activity, there is a broad range of service choices, ranging from deep archive (passive or custodial—could be off-site protection), to full-service, deluxe services offering a wide variety of choices.

Using the above paragraph, you get a feeling of just how big a driver level of service is.

4. **What guidelines would you recommend to data providers to make the process of active archive and LTA easier and cheaper?**

Being able to provide archive managers more information that addresses points identified in answers to the first 3 questions is a very positive step.

5. **Are there any near-term or over the horizon technologies that may have a big impact on LTA?**

As a follow on to the response to question 2, storage technology has some significant near-term impacts. This involves both active and long-term archives. One of the key breakthroughs for anyone maintaining magnetic tape storage is transitioning from analog to digital formats.

Denny Thurman, dthurman@usgs.gov,
Principal Systems Engineer
EROS Data Center
Raytheon ITSS